

In the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the Application.

Listing of Claims:

1. (Currently amended) In a data storage environment having a first volume of data denominated as the source being stored on a data storage system, and a second volume of data denominated as the clone, ~~and~~ which has data content that is a copy of the data content of the source being stored on the data storage system ~~or on another data storage system~~, a method, operable on a computer system, for protecting the clone's data content during a restoration of the source, the method comprising the steps of:

restoring the source by copying data content from the clone to overwrite the data content of the source; and allowing host reads and writes to the Source during the restore; and

preserving the data content of the clone by not allowing it to be overwritten by host writes during the restoring step.

2. (Original) The method of claim 1, wherein the source and the clone are each represented by respective first and second logical units.

3. (Currently amended) The method of claim 1, wherein ~~a map denominated as a protected~~ restore map is used to track extents of the source that are modified during the restoring and preserving steps.

4. (Currently amended) The method of claim 1, wherein ~~a map~~ ~~denominated as a clone~~ delta map is used to track extents of the clone that are ~~may be~~ different from the clone and the source.

5. (Cancelled)

6. (Currently amended) The method of claim ~~[[5]]~~ 4, wherein the clone delta map is used to copy only extents that are different between the clone and ~~it's~~ the source during the restoring step.

7. (Currently amended) The method of claim 6, wherein the protected restore map is coordinated with the clone delta map for ~~efficient~~ processing of requests to write data to the source.

8. (Currently Amended) A system for protecting data content during restoration of data from a second volume of data to a first volume of data, the system comprising:

a data storage system having a first volume of data denominated as the source being stored on a data storage system, and a second volume of data denominated as the clone, ~~and~~ which has data content that is a copy of the data content of the source being stored on the data storage system ~~or on another data storage system~~[:];

computer-executable program logic configured for causing the ~~following~~ a computer[[-executed steps to occur:] to execute the steps of:

restoring the source by copying data content from the clone to overwrite the data content of the source; and allowing host reads and writes to the [[Source]] source during the restore; and preserving the data content of the clone by not allowing it to be overwritten by host writes during the restoring step.

9. (Original) The system of claim 8, wherein the source and the clone are each represented by respective first and second logical units.

10. (Currently amended) The system of claim 8, wherein ~~a map~~ denominated as a protected restore map is used to track extents of the source that are modified during the restoring and preserving steps.

11. (Currently amended) The system of claim 8, wherein ~~a map~~ denominated as a clone delta map is used to track extents of the clone that are ~~may be~~ different from the clone and the source.

12. (Cancelled)

13. (Currently amended) The system of claim [[12]] 11, wherein the clone delta map is used to copy only extents that are different between the clone and its source during the restoring step.

14. (Currently amended) The system of claim 13, wherein the protected restore map is coordinated with the clone delta map for ~~efficient~~ processing of requests to write data to the source.

15. (Currently Amended) A program product for use in a data storage environment and being for protecting data content during restoration of data from a second volume of data to a first volume of data, wherein the data storage environment includes:

a data storage system having a first volume of data denominated as the source being stored on a data storage system, and a second volume of data denominated as the clone, ~~and~~ which has data content that is a copy of the data content of the source being stored on the data storage system ~~or on another data storage system~~; and[-]

the program product includes computer-executable logic provided from ~~contained on~~ a computer-readable medium and which is configured for causing the following a computer[[-executed step to occur]] to execute the steps of:

restoring the source by copying data content from the clone to overwrite the data content of the source; and allowing host reads and writes to the Source during the restore; and

preserving the data content of the clone by not allowing it to be overwritten by host writes during the restoring step.

16. (Original) The program product of claim 15, wherein the source and the clone are each represented by respective first and second logical units.

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17. (Currently amended) The program product of claim 15, wherein a protected restore map is used to track extents of the source that are modified during the restoring and preserving steps.

18. (Currently amended) The program product of claim 15, wherein a clone delta map is used to track extents of the clone that are ~~may be~~ different from the clone and the source.

19. (Cancelled)

20. (Currently amended) The program product of claim ~~[[19]]~~ 18, wherein the clone delta map is used to copy only extents that are different between the clone and its source during the restoring step.

21. (Currently amended) The program product of claim 20, wherein the protected restore map is coordinated with the clone delta map for ~~efficient~~ processing of requests to write data to the source.